



ЕКОНОМІКА ТА КОНКУРЕНТОСПРОМОЖНІСТЬ ПІДПРИЄМСТВ

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APPLICATION OF ABC AND XYZ-ANALYSIS TO OPTIMIZE RECEIVABLES (ON THE EXAMPLE OF "KOMUNPOSTACH" LLC)

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ЗАСТОСУВАННЯ АВС ТА XYZ-АНАЛІЗУ ДЛЯ ОПТИМІЗАЦІЇ ДЕБІТОРСЬКОЇ ЗАБОРГОВАНOSTІ (НА ПРИКЛАДІ ТОВ «КОМУНПОСТАЧ»)

Formulation of the problem. In today's economic environment, the development of relationships between enterprises has reached a new level of transformation. Debt relations in the conditions of fierce competition and changing environment have become much more complicated. One of the most important components of the management of modern enterprises is the management of accounts receivable. The presence of a certain amount of receivables is an integral result of the business activity of the enterprise, and the optimization of its volume is one of the most urgent tasks to be solved. The development of corporate debt relations necessitates effective tools for managing and controlling its level and structure.

The basis of the financial and economic activity of the enterprise is the settlement transactions, which, on the one hand, accounts receivable, and on the other – accounts payable, which in turn adversely affects

the activity of the entity. Therefore, the subjects of market relations need to have an effective management of receivables and payables, contributing to their constant reduction. The implementation of all necessary measures to effectively manage them requires a clear understanding of the essence of the above concepts.

As a result of reduced efficiency of business operations due to increasing instability of environmental factors, the structure of accounts payable and receivables may be disturbed and adversely affect the financial position, stability and solvency. This is due to the need to improve their management system and enhance effective analysis.

Thus, the study of accounts payable and receivable, aimed at finding ways to more effectively form and use them, is becoming more relevant.

Analysis of recent research and publications. In the analysis of literary sources, a clear division of authors into two groups can be traced. The authors of the first group investigate the factors at the macro level, ignoring the factors of the micro level, and the second - investigate the factors of influence at the micro level, without considering the significance of the influence of higher order factors. In both the first and second cases, there is an attraction to economic factors [1, p. 58].

K. Surnina notes that receivables are caused not only by economic preconditions, but also by the improper organization of accounting at the enterprise [2]. In this case, the economic conditions are not disclosed, and the reasons related to accounting are very thoroughly substantiated and analysed. Thus, the main of them the author attributes the improper organization of accounting, untimely processing of primary documents and the non-use of convenient forms of calculations.

A. Honcharuk focuses on macroeconomic factors of non-payment, separating non-economic factors [3]. A similar approach is observed in I. Nikolaieva, who among the main causes of the occurrence of overdue and bad receivables notes the crisis in the economy [4].

V. Zubov divides the factors of the occurrence of overdue and bad receivables into price, budget and tax, production and institutional [5]. From the point of view of V. Pashkovsky and A. Shapovalov, the set of factors of arrears should be divided into two groups: economic and organizational [6; 7].

An interesting point is I. Akhnovska view on the problem of determining the factors of overdue receivables from the position of applied value [8]. The author proposes to observe the factors through the prism of the ability of the business entity to influence them. That is, it is proposed to divide the factors into those which are regulated (by a separate economic entity) and those which are not regulated.

The scientific achievements of these scientists are important in the theory and practice of corporate debt management. However, accounts receivable management requires further in-depth research. Problems of receivables management of enterprises are caused by complexity and diversity of interaction of subjects and objects of debt relations, which influenced the orientation and level of development of theoretical and practical aspects of their regulation. The constant expansion of the credit market of Ukraine and the emergence of new forms of debt and credit relations in the practice of domestic enterprises, together with changes in the external environment and a complex system of legal acts, require the enterprises new methodological approaches to managing accounts receivable. A scientifically sound system of receivables management can make a significant contribution to improving the efficiency of businesses.

Setting objectives. Receivables as an asset have the potential to directly or indirectly contribute to the flow of funds to the enterprise, which characterizes its economic profitability. Thus, the "quality" of accounts receivable should be viewed through the prism of economic advantage of a particular accounts receivable for a particular enterprise.

The purpose of the study is to analyse in detail the effect of accounts receivable on the economic activity of entities in terms of market relations and to provide specific recommendations for their effective use and circulation in the activities of "Komunpostach" LLC.

The achievement of this goal necessitated the following tasks: to propose a series of measures that would improve the management of accounts receivable; group receivables by ABC analysis; make recommendations on the increase in accounts payable.

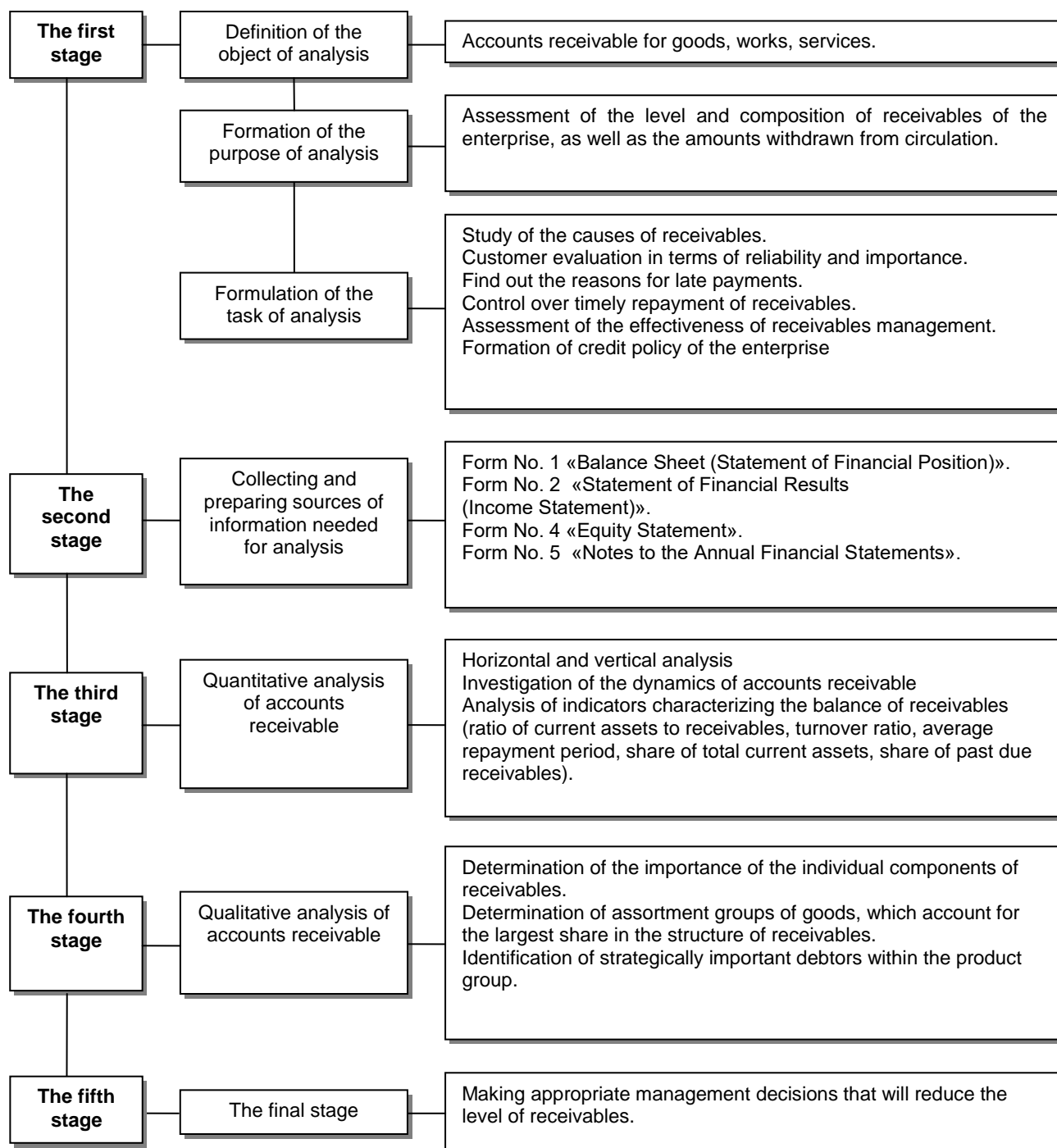
Outline of the main research material. Management of settlement processes is facilitated by the periodization of liabilities and claims. As a result, it is important for internal users to analyse receivables by time of occurrence, which will make it possible to identify and ensure timely implementation of measures to write off overdue receivables.

The analysis of payments with buyers and customers by maturity and repayment period allows determining the effectiveness of the company in providing discounts and loans. Accounts receivable pooling is of practical value to businesses and greatly simplifies the procedure for taking inventory of accounts payable.

The practical experience of managing enterprises in uncertainty confirms that to ensure the efficiency of the respective processes it is not enough to carry out only a quantitative analysis of the indicators of estimation of the current state of accounts receivable.

To resolve this issue, one must also apply a qualitative analysis, the main task of which is to identify the types of products that cause the highest receivables for goods, works, and services.

This also makes it possible to identify the most valuable customers of the enterprise (for example, major suppliers, intermediaries, consumers and other market infrastructure entities), the main types of products that most frequently owe receivables.



**Figure 1. The proposed sequence of analysis of receivables
LLC "Komunpostach"**

Source: author development

To solve these problems we propose to use quality ABC and XYZ analysis (Table 1) [9]. In the table 1 of "Komunpostach" LLC services is divided into product groups for which receivables arise. Assortment groups of goods with the highest share of receivables are classified in group A, with medium – in group B, with low – in group C. Within these groups are strategically important clients (group X), clients that use services seasonally (group Y), small customers who do not regularly use the services of "Komunpostach" LLC with poor forecasting accuracy (Group Z).

Table 1

ABC analysis and XYZ analysis of receivables LLC "Komunpostach"

| № | Assortment groups by core customers | Share of receivables in the total amount, % | Product group class | Customer classification based on the level of sales stability and the importance of the debtor |
|---|---|---|---------------------|--|
| 1 | 2 | 3 | 4 | 5 |
| 1 | Implementation of construction, repair, construction and contracting works | 30,30 | Group A | |
| | LLC "Budimex" | | | Group X |
| | LKP "Balaton-409" | | | Group Z |
| | LKP "Zamarstinov-400" | | | Group Y |
| 2 | Rental of equipment, machinery and equipment for industrial use | 23,70 | Group A | |
| | LKP "Pid Holoskom-410" | | | Group Y |
| | LKP "Zboishcha-408" | | | Group Y |
| 3 | Construction, reconstruction and other real estate activities | 15,20 | Group B | |
| | LKP "Riasne-403" | | | Group X |
| | LKP "Vira" | | | Group Y |
| | LKP "Dim" | | | Group Z |
| 4 | Repair and maintenance of machinery and equipment for industrial use | 11,40 | Group B | |
| | MP "Stykhiiia" | | | Group X |
| | LKP "Pidzamche - 404" | | | Group Y |
| 5 | Activities for the organization of transportation of goods by road | 9,50 | Group C | |
| | LKP "Varshavske-407" | | | Group X |
| | LKP "Pivnichne-411" | | | Group Y |
| | LLC "Aeroprokat" | | | Group Z |
| 6 | Renting, buying, renting, selling and leasing of movable and immovable property | 7,30 | Group C | |
| | LKP "Riasne-402" | | | Group Y |
| | LKP "Riasne-403" | | | Group X |
| | LKP "Topolia-406" | | | Group Z |
| | LKP "№500" | | | Group Y |
| 7 | Organization car parking | 2,60 | Group C | |
| | MP "Stykhiiia" | | | Group X |
| | LLC "Proton" | | | Group Z |
| | LLC "Artbys" | | | Group Y |
| | LLC "EnerhiiaM" | | | Group Y |
| | Together | 100,00 | | |

Source: calculated by the authors

Combining the results of the ABC and XYZ analyses identified the nine groups that are listed in the matrix (Table 2). Each of them requires the development of its technology of management on the indicators of the share of receivables in its total amount at the enterprise, as well as the accuracy of forecasting its dynamics.

Table 2

**The matrix combining the results of ABC and XYZ analysis
receivables LLC "Komunpostach"**

| Customer importance / product group \ Receivables weight customer debt by product group: | The highest | Moderate | The smallest |
|---|-------------|----------|--------------|
| Most | AX | AY | AZ |
| Moderate | BX | BY | BZ |
| The smallest | CX | CY | CZ |

Source: compiled by authors based on materials [10]

The result of complex ABC and XYZ analysis was to identify the main, most important resources of the enterprise and to establish on this basis priority in the structuring of business processes. The AX, AY and AZ groups require the greatest attention, careful planning of requirements, daily accounting and control, constant analysis of deviations from the planned indicators. Moreover, for the category AX, it is necessary to calculate the optimal size of deliveries, and for the category AZ, it is more efficient to use the supply system on demand, with the obligatory calculation of the amount of insurance stock. Generalized planning methods are used for CX, CY, CZ resources.

The study found that in order to effectively manage accounts receivable, an enterprise must perform the following measures:

1. To carry out preliminary check of clients on possibility of timely repayment of their debt.
2. To form a rating of creditworthiness of clients and to refuse from further cooperation with clients, with low credit rating. Factors such as the total term of cooperation with the client, the average monthly sales or cost of services rendered, the rate of turnover of the client's accounts receivable, the amounts and terms of the overdue accounts receivable, the assessment of the client's importance for the organization should be taken into account in the rating formation.
3. Determine the criteria for granting a commodity loan, its marginal size, the terms of delaying repayment of the debt, the amount and procedure for granting discounts, the form of penalties.
4. Classify accounts receivable on various grounds (by debtors, maturity and maturity, basis for receivables) in order to establish a group of major customers that provide the enterprise with the highest profits and which are undesirable; identify the groups of defaulters in which the urgent repayment of the debt is required; identify the types of products or services that are most likely to be owed.
5. Develop a plan of measures for work with each client with definition of terms, responsible, cost estimation, and also the received effect.
6. Organize the register of accounts receivable and distinguish overdue accounts receivable.
7. To make a real assessment of the value and speed of receivables turnover.
8. Link the personnel motivation system to the receivable amount, and develop and approve motivation provisions for the results achieved.
9. To enter information on the planned amounts of repayment of receivables in the financial plan of the enterprise and to monitor its implementation.
10. Introduce other modern methods of managing receivables, such as factoring, insurance of financial risks, use of payment of promissory notes.

All of these measures and methods of managing receivables will reduce the risk of non-receipt of funds from debtors and help to establish effective credit policy of "Komunpostach" LLC, which, in turn, will directly increase the level of profitability of production and economic activity.

Conclusions from the study. The above confirms that a combined ABC and XYZ analysis is an effective tool for structuring an assortment of goods and customers aimed at optimizing and ensuring the efficiency of receivables management. The presence of mechanisms such as ABC and XYZ analysis in the information system is a competitive advantage of the enterprise and provides effective management of receivables, which in turn will help to reduce the risk of non-receipt of funds from debtors and help to establish effective credit policy of "Komunpostach" LLC.

The next step in improving our debt management is to revise the credit policy of the enterprise to optimize its current debt and build up its long-term liabilities. It should be said that the basis for financing current assets is the short-term debt of the company (commercial lending, short-term bank loans). Accounts payable is proposed to be extended because the payables turnover ratio is sufficiently high, and therefore the company settles its obligations in a timely manner. Long-term sources of financing for the activity of enterprises can be mainly bank loans. As "Komunpostach" LLC envisages the development of cooperation with condominiums, it is advisable to negotiate with the largest creditors of the enterprise in order to prolong

the terms of payment of probable liabilities and attract bank loans. Increasing long-term liabilities will be the basis for securing company financing in the future.

Thus, the developed design solutions can become one of the tools to increase the company's competitiveness in a dynamic market environment.

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